reflection rather than the mutually perpendicular encoder wheels shown in the embodiment shown in Figs. 6a-6b

What is claimed is:

Sub a1

1. A pointing device capable of changing the appearance of a display, comprising:

a housing having a cover and a base;

a single spool cable receiver rotatably mounted to the housing;

a cable having a first end and a second end with the second end mounted to the cable receiver,

wherein the pointing device has a first mode with a first portion of the cable having a first length external to the pointing device and a second portion of the cable wound around the cable receiver; and a second mode with the first portion of the cable having a second length external to the pointing device less than the first length.

2. The pointing device of claim 1, wherein the pointing device has a third mode with a third portion of the cable having a third length external to the pointing device less than the first length and greater than the second length.

Sub a2

3. The pointing device of claim 1, further comprising a switch which is activated to generate a pointing signal to the display.

4. The pointing device of claim 3, further comprising a switch which is capactively coupled to the cable receiver.

5. The pointing device of claim 1, further comprising a tracking device which generates signals based on movement of the pointing device, the signals controlling the movement of a reference on the display.

6. The pointing device of claim 5, further comprising a switch which is activated to generate a pointing signal to the display.

7. The pointing device of claim 5, wherein the tracking device is mounted to the cable receiver.

8. The pointing device of claim 7, further comprising:

a reference stop, and

a detent,

wherein the detent aligns the cable receiver to the housing.

9. ~~The pointing device of claim 5, wherein the~~ tracking device ~~further~~ comprises an optical sensor for optically monitoring movement ~~of the~~ pointing device.

10. The pointing device ~~of~~ claim 1, further comprising:

a reference ~~stop~~, and

a ~~detent~~,

~~wherein the detent aligns the cable receiver to the housing.~~

11. The pointing device of claim 1, wherein the cable is shielded.

12. ~~The pointing device of claim 1, wherein the cover further~~ comprises a lid, wherein the lid is disposed in an open position when the cable is being wound around the cable receiver and the lid is disposed in a closed position when covering the cable receiver.

13. The pointing device of claim 1, further comprising:

a rotatable disk affixed to the cable receiver,

wherein the cover further comprises an opening in the cover and the rotatable disk is disposed within the opening in the cover;

wherein the rotatable disk has a rotatable disk top further comprising:

a depression formed in the exterior surface of the rotatable disk top, the depression having a diameter; and

an aperture within the depression less than the diameter of the depression.

14. The pointing device of claim 1, further comprising:
a connector attached to the cable at the first end, and
a connector receiver formed in the housing which accepts the connector.

15. The pointing device of claim 1, further comprising
a rotary connector coupling the cable to the tracking device.

16. The pointing device of claim 1, further comprising
a rotatable control circuit mounted to the cable receiver for producing position signals in response to movement of the housing; and
a tracking mechanism disposed in the housing coupled to the rotatable control circuit for generating signals in response to movement of the housing.

17. The pointing device of claim 16, further comprising:
a reference stop, and
a detent,
wherein the detent aligns the cable receiver to the base.

18. The pointing device of claim 16, wherein the rotatable control circuit further comprises:
first and second transducers for receiving user commands indicating movement of the housing and producing first and second position signals in response thereto.

19. The pointing device of claim 18, wherein the tracking mechanism further comprises: a first wheel with a polygonal outer surface rotatably mounted relative to the housing; and
a second wheel rotatably mounted relative to the housing,
wherein the first transducer is operably coupled to the first wheel producing a first signal and the second transducer is operably coupled to the second wheel producing a

second signal in response to rotation of the first and second wheels in response to movement of the housing.

20. The pointing device of claim 1, further comprising:

a rotatable disk mounted to the cable receiver; and

a slot in the housing, wherein the rotatable disk protrudes through the slot.

21. The pointing device of claim 1, further comprising:

a spring attached to the spool for rotating the spool in a first direction causing the cable to wind onto the spool; and

a latching mechanism mounted to the housing.

22. A pointing device capable of changing the appearance of a display, comprising:

a housing having a cover and a base;

a cable receiver rotatably mounted to the housing;

a cable having a first end and a second end with the second end mounted to the cable receiver, where a majority of the cable is capable of being unwound from the cable receiver,

wherein the pointing device has a first mode with a first portion of the cable having a first length external to the pointing device and a second portion of the cable wound around the cable receiver, and a second mode with the first portion of the cable having a second length external to the pointing device less than the first length.

23. A pointing device capable of changing the appearance of a display, comprising:

a housing having a cover and a base;

a cable receiver rotatably mounted to the housing;

a cable having a first end and a second end with the second end mounted to the cable receiver, where the cable is essentially continuously wound in a first direction around the cable receiver,

wherein the pointing device has a first mode with a first portion of the cable having a first length external to the pointing device and a second portion of the cable wound around the spool; and a second mode with the first portion of the cable having a second length external to the pointing device less than the first length.

24. A system, comprising:

a computer;

a display, and

a pointing device, wherein the pointing device is capable of changing the appearance of a display, the pointing device further comprising:

a housing having a cover and a base;

a single spool cable receiver rotatably mounted to the housing;

a cable having a first end and a second end with the second end mounted to the cable receiver,

wherein the pointing device has a first mode with a first portion of the cable having a first length external to the pointing device and a second portion of the cable wound around the cable receiver; and a second mode with the first portion of the cable having a second length external to the pointing device less than the first length.

25. A system, comprising:

a computer;

a display, and

a pointing device, wherein the pointing device is capable of changing the appearance of a display, the pointing device further comprising:

a housing having a cover and a base;

a cable receiver movably coupled to the housing;

a cable having a first end and a second end with the second end mounted to the cable receiver;

a tracking device disposed within the housing;

a rotary connector coupling the cable to the tracking device,

wherein the pointing device has a first mode with a first portion of the cable having a first length external to the pointing device and a second portion of the cable wrapped around the cable receiver; and a second mode with the first portion of the cable having a second length external to the pointing device less than the first length.

26. A system, comprising:

a computer;

a display, and

a pointing device, wherein the pointing device is capable of changing the appearance of a display, the pointing device further comprising:

a housing having a cover and a base;

a cable receiver movably coupled to the housing;

a cable having a first end and a second end with the second end mounted to the cable receiver;

a rotatable control circuit for producing position signals in response to movement of the housing mounted to the cable receiver; and

a tracking mechanism for generating signals in response to movement of the housing disposed in the housing,

wherein the pointing device has a first mode with a first portion of the cable having a first length external to the pointing device and a second portion of the cable wrapped around the cable receiver; and a second mode with the first portion of the cable having a second length external to the pointing device less than the first length.

27. A method for storing a cable with a connector in a housing containing a cable receiver with a connector receiver and the connector coupled to a computer, comprising the steps of:

disconnecting the cable from a computer;

opening the lid;

rotating ~~the rotatable~~ disk to wind the cable ~~around the cable~~ receiver;

inserting the connector into the connector receiver; and

closing the lid.

28. The method of claim 27, wherein the winding step further comprises the step of inserting a stylus into an aperture and rotating the rotatable disk to wind the cable around the cable receiver.

Add a8